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Detail Page

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Application Number: 36350397

Publication Date: 19990709

Title:

- PHOTOELECTRIC CONVERSION ELEMENT AND LIGHT REPRODUCING ELECTROCHEMICAL CELL

Inventor(s):

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- SHIRAI HIROYOSHI
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- YANAGIDA SHOZO

Assignee:

- FUJI PHOTO FILM CO LTD

Priority:

- Priority Country: JP
- Priority Number: 36350397
- Priority Date: 19971216

IPC:

- H01L 31/04
- H01M 14/00

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 12 HCA COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 131:90194 HCA
 TITLE: Photoelectric converters and photoelectrochemical cells thereof
 INVENTOR(S): Shirato, Kentaro; Yanagida, Shozo; Shirai, Hiroyoshi; Hanabusa, Kenji
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

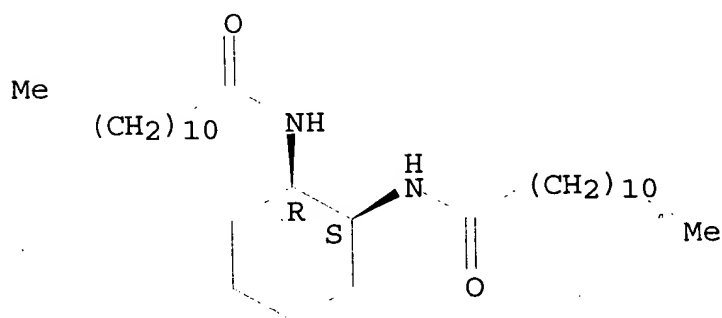
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11185836	A2	19990709	JP 1997-363503	19971216

AB The photoelec. converters have a conductive substrate, a layer of semiconductor particles contg. adsorbed dye on the substrate, a gel electrolyte, and a counter electrode; where the gel electrolyte contains an electrolyte and a gelling agent having mol. wt. .ltoreq.1000. The salts are selected from metal iodide, quaternary ammonium iodide, quaternary imidazolium iodide, quaternary pyridinium iodide, metal bromide, quaternary ammonium bromide, S compds., viologen dye, and hydroquinone-quinone.

IT 230307-96-7
 (electrolyte gelling agents for photoelectrochem. cells with dye adsorbed semiconductor electrodes)

RN 230307-96-7 HCA
 CN Dodecanamide, N,N'-(1R,2S)-1,2-cyclohexanediylbis-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IC ICM H01M014-00
 ICS H01L031-04
 CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 ST photoelectrochem cell pigment semiconductor particle; quaternary

- onium salt **electrolyte** photoelectrochem cell; gel
electrolyte photoelectrochem cell
Electrolytes
- IT Photoelectrochemical cells
 (compns. of gel **electrolytes** for photoelectrochem.
 cells with dye adsorbed semiconductor electrodes)
- IT 230308-00-6
 (compns. of gel **electrolytes** for photoelectrochem.
 cells \with dye adsorbed semiconductor electrodes)
- IT 75-05-8, Acetonitrile, uses 96-49-1, Ethylene carbonate
 108-32-7, Propylene carbonate 110-71-4 631-40-3 10377-51-2,
 Lithium iodide 13463-67-7, Titania, uses 19836-78-3,
 3-Methyl-2-oxazolidinone 230308-02-8
 (compns. of gel **electrolytes** for photoelectrochem.
 cells with dye adsorbed semiconductor electrodes)
- IT 110067-66-8 141460-19-7 149005-03-8 205817-35-2 207347-46-4
 219727-02-3 219727-09-0 223659-97-0 230307-77-4 230307-78-5
 230307-79-6 230307-80-9 230307-81-0 230307-82-1 230307-83-2
 230307-84-3 230307-85-4 230307-86-5 230307-87-6 230307-89-8
 230308-15-3
 (compns. of gel **electrolytes** for photoelectrochem.
 cells with dye adsorbed semiconductor electrodes)
- IT 106-14-9 105900-20-7 134589-34-7 159142-29-7 182246-24-8
 183156-26-5 183624-78-4 189299-30-7 230307-92-3 230307-93-4
 230307-95-6 230307-96-7
 (**electrolyte** gelling agents for photoelectrochem. cells
 with dye adsorbed semiconductor electrodes)

L15 ANSWER 4 OF 12 HCA COPYRIGHT 2001 ACS

ACCESSION-NUMBER:

126:192121 HCA

TITLE:

A case of the indirect role of traces of water
 in the electroreduction of organic substrates

AUTHOR(S):

Arevalo, M. C.; Maran, F.; Severin, M. G.;
 Vianello, E.

CORPORATE SOURCE:

Dipartimento de Quimica Fisica, Universidad de
 La Laguna, Tenerife, Spain

SOURCE:

J. Electroanal. Chem. (1996), 418(1-2), 47-52
 CODEN: JECHE; ISSN: 0368-1874

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LANGUAGE:

English

AB Adventitious water is often the main protonating agent towards the
 basic intermediates of org. electrode redns. in dipolar
 non-protogenic solvents. OH- ions thus formed do not generally
 modify the redn. pattern, unless they are able to catalyze the
 transformation of some of the species involved in the electrode
 process. This is the case in the two-electron redn. of Ph₃CSC₆H₄CN
 in DMF, which involves proton transfer from residual water to the
 redn. intermediate Ph₃C-. The ensuing OH- ions catalyze hydrolysis
 of the substrate, with formation of the corresponding amide. The
 hydrolysis process is sufficiently fast to show its effect not only
 during macroscale **electrolysis** but also in the much